Investigating Primary Productivity Vernier # 17 Sample Data

Preliminary Activity Results:

Assumption: An Algal bloom (Chlorella) was placed in each of the DO Bottles over a 24 hour period.

Table 1: DO Levels using Dark and Light Bottle Method 24 hour period		
Water Sample	**Light Exposure (%)**	**DO (mg/L)**
Initial	n/a	7.0
Light	100	8.6
Dark	0	6.9

Answer questions 1-5 from the lab instruction paper on your own paper.

Sample Data Measuring Effect of Light Intensity on the Algal Blooms

Table 2: The Effect of Light Intensity 22 hour period			
% Light	**DO (mg/L)**	**Gross Productivity**	**Net Productivity**
Initial	7.0	n/a	n/a
100%	8.2		
65%	7.6		
25%	7.5		
10%	7.2		
2%	6.9		
Dark	6.4	n/a	n/a

Fill in the data chart, show all of your calculations, graph the data (line graph). Then write a paragraph that explains the results. Add an additional paragraph that explains how this data can be used to determine the rate of both gross and net primary productivity.